FILE 'HOME' ENTERED AT 09:47:20 ON 19 MAY 2003

=> file pnttext

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'EUROPATFULL' ENTERED AT 09:47:37 ON 19 MAY 2003 COPYRIGHT (c) 2003 WILA Verlag Muenchen (WILA)

FILE 'PATDPAFULL' ENTERED AT 09:47:37 ON 19 MAY 2003 COPYRIGHT (C) 2003 DPMA

FILE 'PCTFULL' ENTERED AT 09:47:37 ON 19 MAY 2003 COPYRIGHT (C) 2003 Univentio

FILE 'RDISCLOSURE' ENTERED AT 09:47:37 ON 19 MAY 2003 COPYRIGHT (C) 2003 Kenneth Mason Publications Ltd.

FILE 'USPATFULL' ENTERED AT 09:47:37 ON 19 MAY 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:47:37 ON 19 MAY 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s Ong, Beng S./in

'IN' IS NOT A VALID FIELD CODE L1 140 ONG, BENG S./IN

=> s l1 and polythiophene#

L2 0 L1 AND POLYTHIOPHENE#

=> s polythiophene#

L3 4806 POLYTHIOPHENE#

=> s 13 and tetrahydrofuran

L4 1218 L3 AND TETRAHYDROFURAN

=> s 14 and diphenyl phosphinoethane?

L5 0 L4 AND DIPHENYL PHOSPHINOETHANE?

=> s 14 and (dichloro-nickel or dichloronickel)

L6 3 L4 AND (DICHLORO-NICKEL OR DICHLORONICKEL)

=> d 16 1-3

L6 ANSWER 1 OF 3 PCTFULL COPYRIGHT 2003 Univentio



AN TIEN TIFR IN 2003001616 PCTFULL ED 20030115 EW 200301
LIGHT EMITTING MATERIAL AND ORGANIC LIGHT-EMITTING DEVICE
MATERIAU PHOTOEMETTEUR ET DISPOSITIF PHOTOEMETTEUR ORGANIQUE
TAKEUCHI, Masataka, Corporate R & D Center, Showa Denko K.K., 1-1,
Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];
NAIJO, Shuichi, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];
ITO, Naoko, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];
SHIRANE, Koro, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];
IGARASHI, Takeshi, Corporate R & D Center, Showa Denko K.K., 1-1,
Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];

```
TAKAHASHI, Yoshiaki, Corporate R & D Center, Showa Denko K.K., 1-1,
       Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP];
       KAMACHI, Motoaki, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
       1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP]
       SHOWA DENKO K.K., 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo 105-8518,
PΑ
       JP [JP, JP], for all designates States except US;
       TAKEUCHI, Masataka, Corporate R & D Center, Showa Denko K.K., 1-1,
       Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for
       US only;
       NAIJO, Shuichi, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
       1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for US only;
       ITO, Naoko, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
       1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for US only;
       SHIRANE, Koro, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
       1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for US only;
       IGARASHI, Takeshi, Corporate R & D Center, Showa Denko K.K., 1-1,
       Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for
       TAKAHASHI, Yoshiaki, Corporate R & D Center, Showa Denko K.K., 1-1,
       Ohnodai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for
       KAMACHĪ, Motoaki, Corporate R & D Center, Showa Denko K.K., 1-1, Ohnodai
       1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, JP [JP, JP], for US only
ΑG
       OHIE, Kunihisa, Ohie Patent Office, Horiguchi No.2 Bldg. 7F, 2-6,
       Nihonbashi-Ningyocho 2-chome, Chuo-ku, Tokyo 103-0013, JP
LAF
       English
       English
LA
DT
       Patent
PΙ
       WO 2003001616
                            A2 20030103
\overline{\mathtt{DS}}
                   AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
                   DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS KE
                   KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
                   OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG
                   US UZ VN YU ZA ZM ZW
       RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
       RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
       RW (EPO):
                   AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
       RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
ΑI
       WO 2002-JP6139
                            A 20020620
PRAI
       JP 2001-2001-186120
                               20010620
       JP 2001-2001-188183
                               20010621
       US 2001-60/301,844
                               20010702
                               20010703
       US 2001-60/302,372
       JP 2001-2001-241647
                               20010809
       JP 2001-2001-263525
                               20010831
       US 2001-60/317,115
                               20010906
       JP 2001-2001-306282
                               20011002
       US 2001-60/330,815
                               20011031
       JP 2001-2001-345136
                               20011109
       JP 2001-2001-350076
                               20011115
       JP 2001-2001-369529
                               20011204
       US 2001-60/337,157
                               20011210
       US 2001-60/337,160
                               20011210
       US 2001-60/337,161
                               20011210
       JP 2002-2002-80456
                               20020322
       JP 2002-2002-90590
                               20020328
ICM
       H01L051-30
L6
    ANSWER 2 OF 3 USPATFULL
           Citing
   Full
   Text
         <u>References</u>
       2003:93810 USPATFULL
```

Luminescent element material, luminescent element, ethylene derivative

having n-containing 7-membered ring, and benzoazepine derivative

3 of 4

AN TI

```
Sato, Tadahisa, Kanagawa, JAPAN
IN
       Okada, Hisashi, Kanagawa, JAPAN
PA
       FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)
       <u>US</u> 2003065171
                           A1
                                20030403
PI
       US 2002-141001
                           A1
                                20020509 (10)
ΑI
       Division of Ser. No. US 1999-413848, filed on 7 Oct 1999, GRANTED, Pat.
RLI
       No. US 6413657
PRAI
       JP 1998-285508
                            19981007
       JP 1999-86607
                            19990329
       Utility
DT
       APPLICATION
FS
LN.CNT 1326
INCL
       INCLM: 540/587.000
       INCLS: 428/690.000; 428/917.000; 313/504.000; 313/506.000; 252/301.350
              540/587.000
NCL
       NCLM:
              428/690.000; 428/917.000; 313/504.000; 313/506.000; 252/301.350
       NCLS:
IC
       [7]
       ICM: C07D223-18
       ICS: C09K011-06; H05B033-12
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 3 OF 3 USPATFULL
1.6
          Citing
   Full
   Text
          References
       2002:160473 USPATFULL
AN
       Benzoazepine derivative polymers as luminescent element materials
ΤI
       Sato, Tadahisa, Kanagawa, JAPAN
IN
       Okada, Hisashi, Kanagawa, JAPAN
       Fuji Photo Film Co., Ltd., Kanagawa, JAPAN (non-U.S. corporation)
PΑ
       US 6413657
                           в1
                                20020702
ΡI
ΑI
       US 1999-413848
                                19991007 (9)
       JP 1998-285508
                            19981007
PRAI
       JP 1999-86607
                            19990329
       Utility
DT
       GRANTED
FS
LN.CNT 1283
INCL
       INCLM: 428/690.000
       INCLS: 428/500.000; 428/917.000; 526/259.000; 313/504.000; 313/506.000;
              257/040.000; 257/103.000; 252/301.350
NCL
       NCLM:
              428/690.000
              252/301.350; 257/040.000; 257/103.000; 313/504.000; 313/506.000;
       NCLS:
              428/500.000; 428/917.000; 526/259.000
IC
       [7]
       ICM: H05B033-12
       ICS: C09K011-06; C08F026-06
```

428/690; 428/704; 428/917; 428/500; 428/523; 313/504; 313/506;

252/301.35; 257/40; 257/103; 526/259; 540/576

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

EXF